

Archaeological and Biological Assessment of Submerged Landforms off the California and Oregon Coasts



SAN DIEGO STATE
UNIVERSITY



BUREAU OF OCEAN ENERGY MANAGEMENT



2013 Pacific Inventory Study

1. Database of historical shipwrecks
2. Coastal Properties database
3. Predictive Model of Submerged Landforms

OCS Study
BOEM 2013-0115

Inventory and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific Outer Continental Shelf

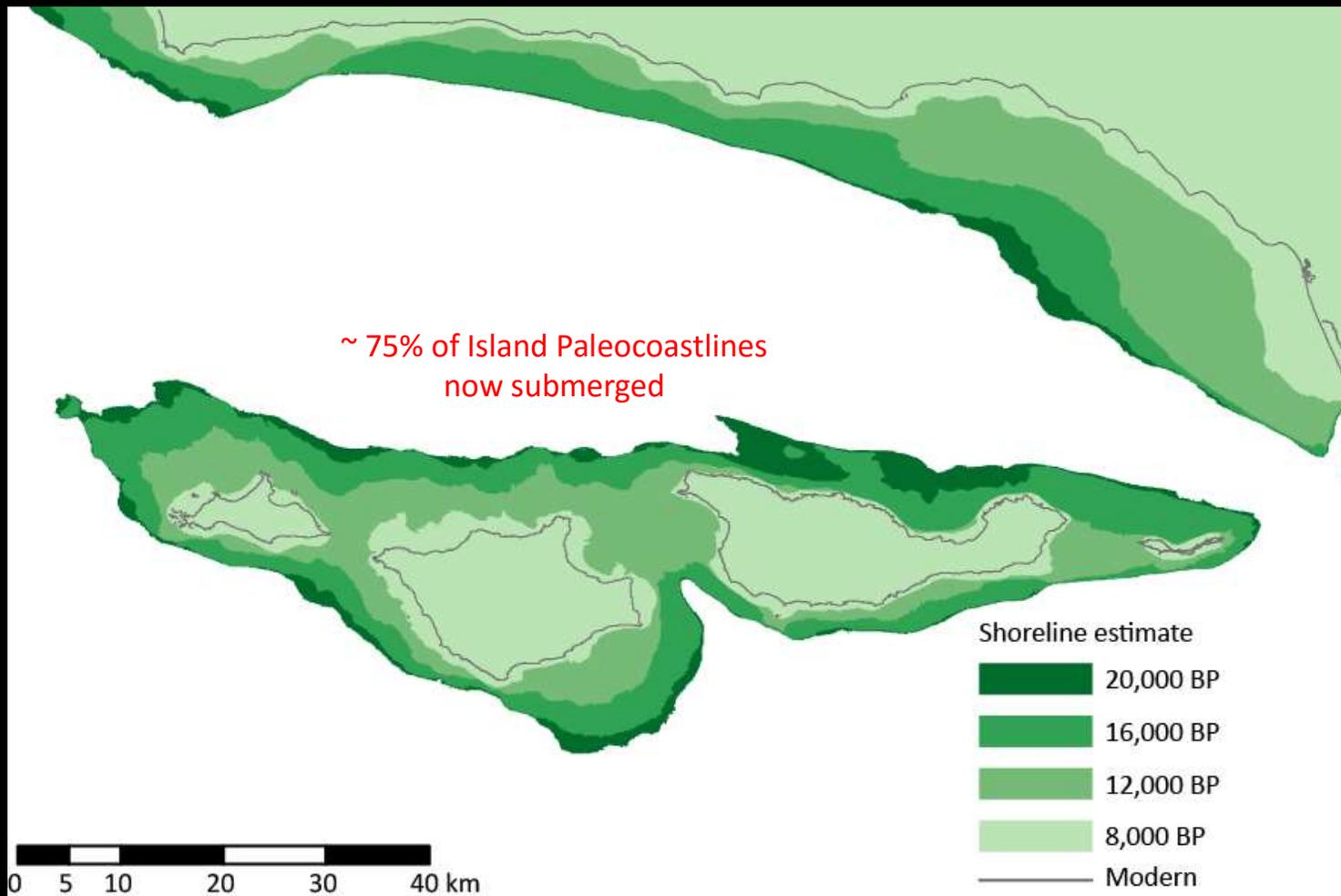


U.S. Department of the Interior
Bureau of Ocean Energy Management
Pacific OCS Region

BOEM
Bureau of Ocean Energy Management

Purpose and Goals:

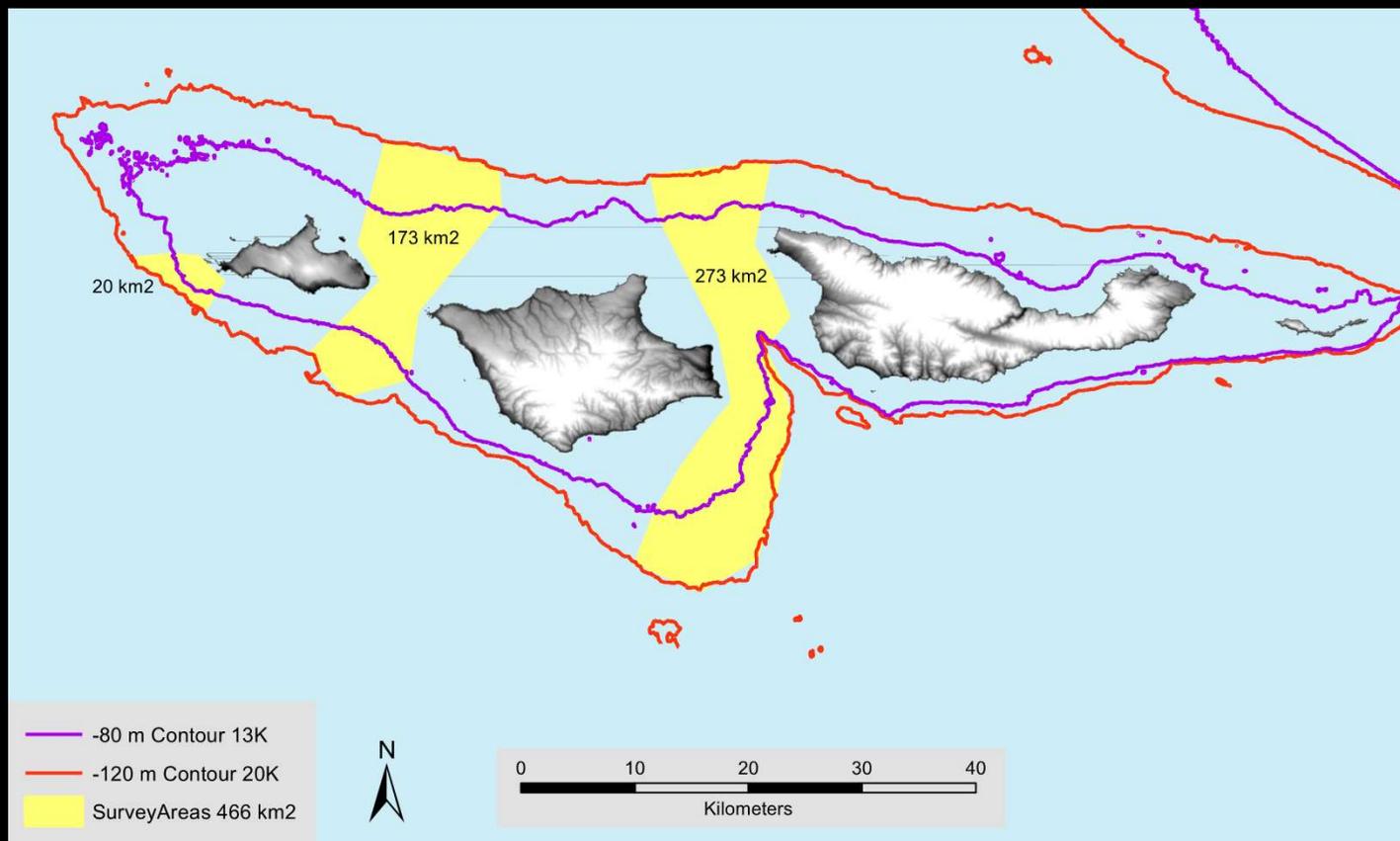
- Identify submerged geological landforms that may contain evidence of human activity and evaluate trophic subsidy near submerged features
- Help avoid ancient Chumash sites and critical biological resources in future offshore development work



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Phase 1:

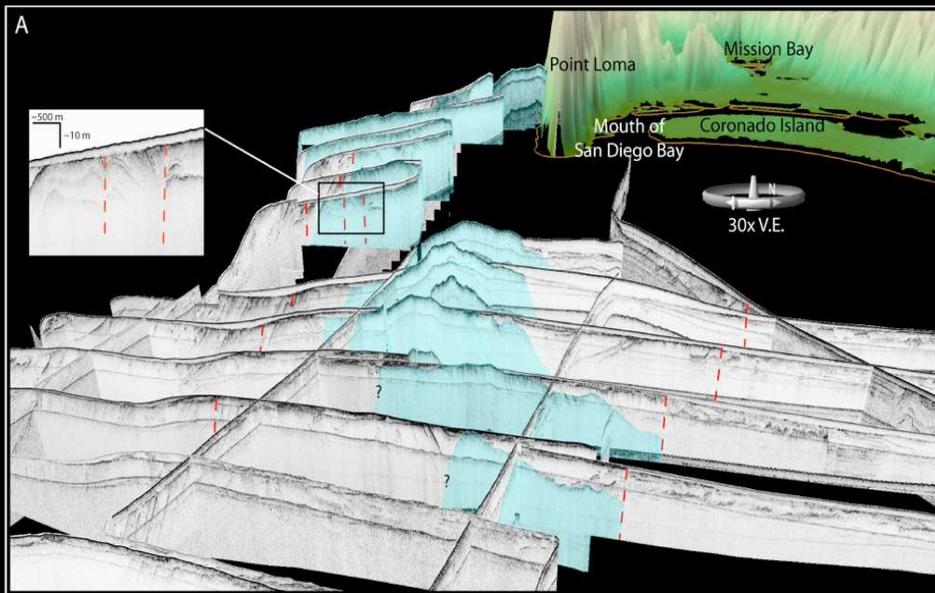
- Evaluate existing remote sensing data, synthesize geological, geophysical, and biological data from offshore southern California
- Refine local sea level models over the last 20,000 years
- Build a predictive model



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Phase 2:

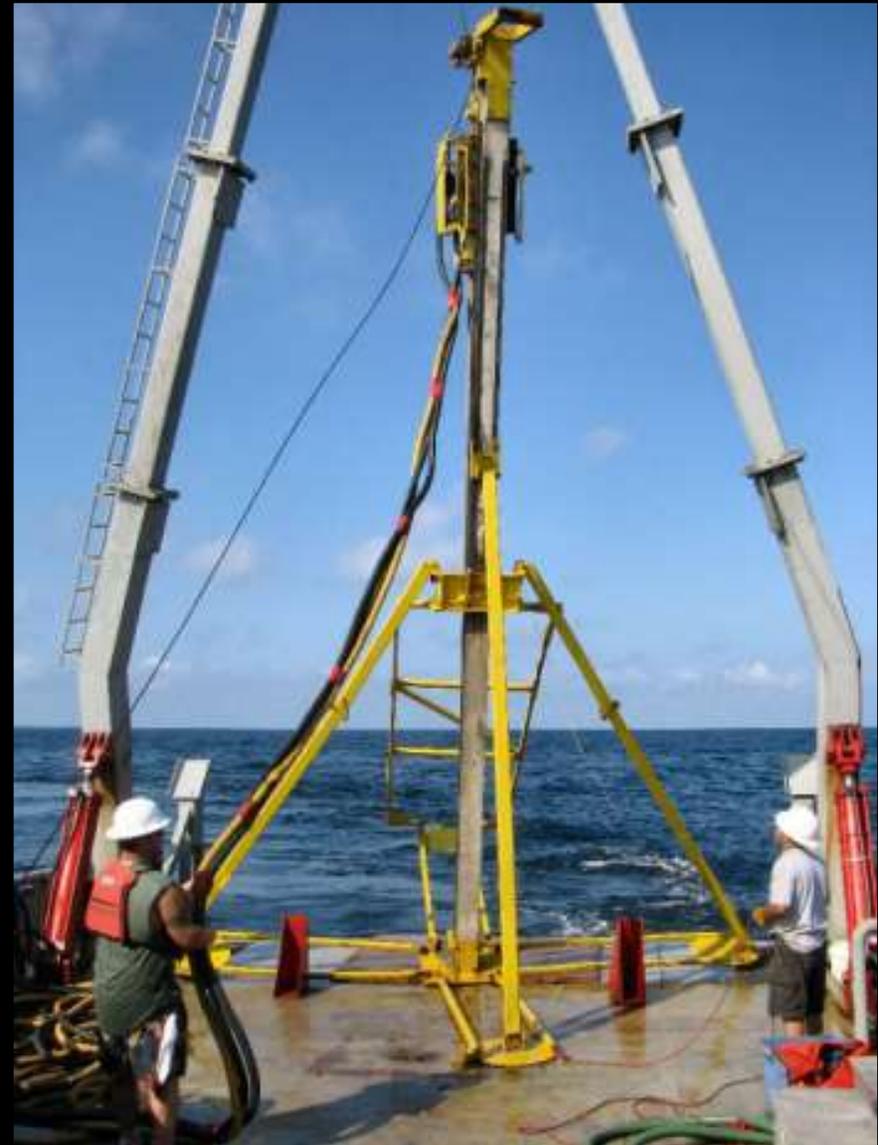
- Geophysical Surveys of four high probability areas (sidescan sonar, sub-bottom) |
- Terrestrial surveys and limited sampling of eroding deposits to help build a “roadmap” |



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Phase 3:

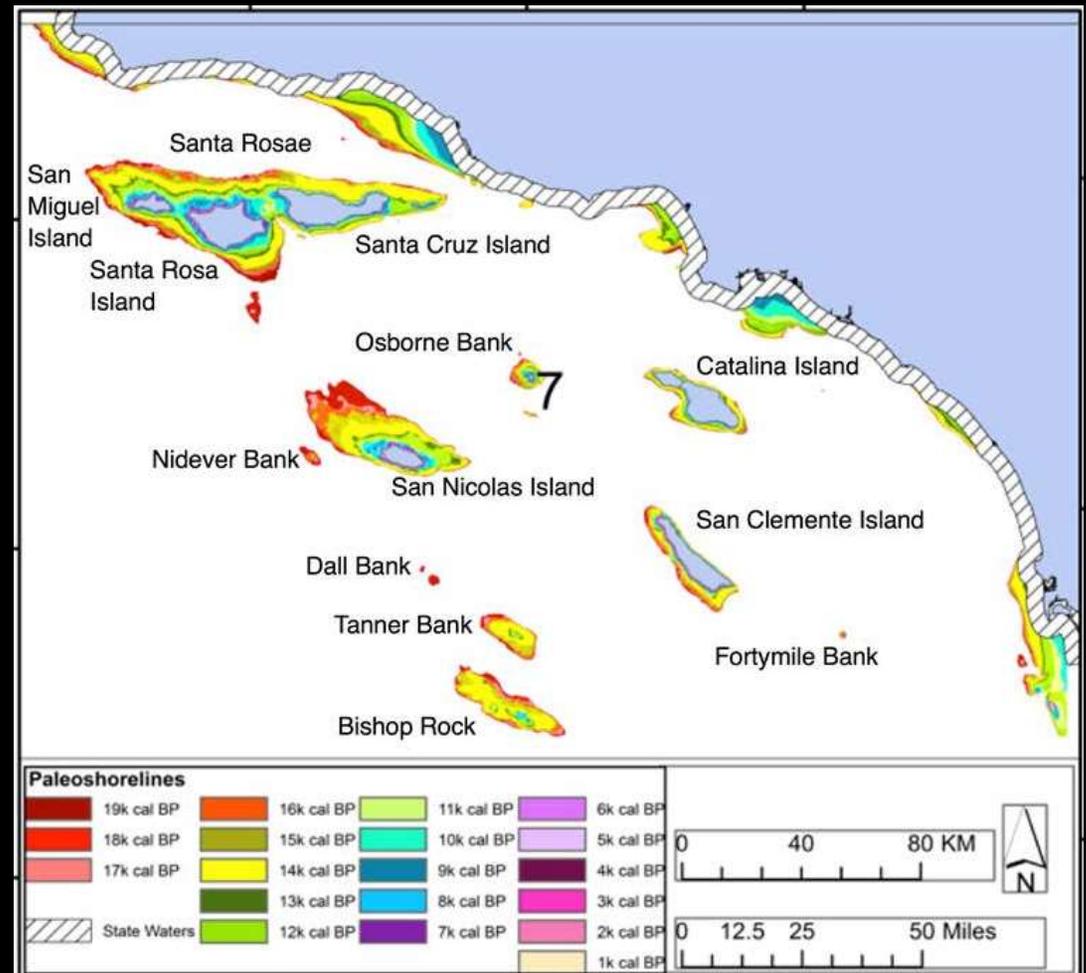
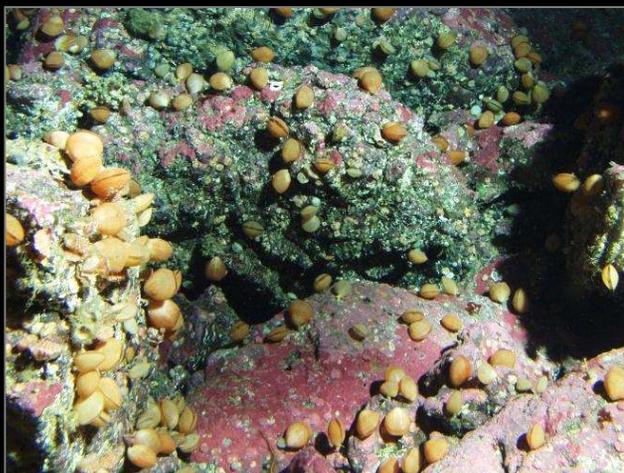
- Collect small core samples from these high probability areas



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Phase 3:

- Analyze new data for indicators of human activity and biological resources associated with paleolandforms.
- Develop a model that can be used to interpret seafloor maps in other areas along the Pacific Coast.
- Help avoid areas that may contain important paleolandforms in the future.



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Timeline:

2015		2016				2017				2018				2019				2020				2021	
Sep-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar																		
Data Synthesis																							
Modeling Building																							
Terrestrial and Geophysical Field Surveys (CA)																							
Geophysical Field Surveys and Coring (CA)																							
Geophysical Field Surveys and Coring (OR)																							
																				Data Analysis and Model Refinement			

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